

EXHIBIT\_10 DATE\_4/1/09 SB\_234

# **Actuaries Northwest**

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March 5, 2009

Ms. Connie Welsh Administrator, Health Care & Benefits Division State of Montana Department of Administration 100 N. Park Ave, Suite 320 Helena, MT 59620

Re: Actuarial Analysis of Senate Bill 234

Dear Ms. Welsh:

Per your request, Actuaries Northwest, LLC performed an evaluation of the cost estimates associated with Senate Bill 234, "An Act Requiring Insurance Coverage for Autism Spectrum Disorders" (ASD). Two cost estimate reports were reviewed – the first by Oliver Wyman Actuarial Consulting dated February 19, 2009 titled "Actuarial Cost Estimate: Montana Senate Bill 234 – An Act Requiring Insurance Coverage for Autism Spectrum Disorders" (OWAC Report), and the second being the Fiscal Note 2011 Biennium for SB0234 prepared by the Montana Governor's Office of Budget and Program Planning dated February 20, 2009 (Fiscal Note).

Actuaries Northwest, LLC provides actuarial consulting services to numerous organizations across the country. Our consulting clients in Montana provide health insurance to over 70,000 Montanans, including the State of Montana and the Montana University System. Our analysis focuses on the State of Montana Health Plan.

Following are comparisons and recommendations regarding assumptions used in the analyses, as well as some other considerations with respect to long term cost implications.

## **Comparison of Assumptions**

The authors of the OWAC Report and the Fiscal Note should be acknowledged for the thorough, well-researched assumptions employed. Many of the assumptions were identical between the reports; therefore, this section focuses only on a few key differences.

Prevalence Rate

The most significant difference in assumptions is the treated autism prevalence rate. Both the OWAC Report and the Fiscal Note base their analysis on the 2007 CDC study, which estimates prevalence at 1 in 150 children; however, the OWAC Report decreases the Montana prevalence

rate by 25%, to 1 in 200 children. The justification of the decrease is data obtained from the Montana IDEA Part B child counts data.

Our analysis uncovered the following information regarding autism prevalence rates:

- The CDC estimate of 1 in 150 children incorporated data for the years 2000 and 2002, and was not adjusted for subsequent potential increases in prevalence through improved identification techniques. There is limited information on the historical growth in prevalence rates for autism; however, the Autism Society of America contends that autism growth rates are 10% to 17% per year¹. Therefore, the base prevalence assumption of 1 in 150 children is likely understated.
- 2008 information for the State of Montana health plan identified 48 children diagnosed with autism out of 9,853 total children, or a prevalence rate of 1 in 205 children. However, this does not consider future increases in prevalence rates, nor does it account for the anticipated increase in autism diagnoses resulting from the enhanced insurance coverage contained in the bill.

Based on this information, it is our opinion that a projected 2010 prevalence rate of 1 in 200 children is understated. We recommend adopting an overall prevalence rate of 1 in 150 children for 2010, with a potential further prevalence rate increase for future year cost estimates.

### Cost per Hour of ABA Service

The assumed cost per hour of ABA service incorporated into the OWAC Report and the Fiscal Note were \$38.61 and \$45.45, respectively. To analyze the effect of the differing assumptions, we determined the hourly rate needed to consume the annual benefit for each age group with the following results:

	Ages	Ages	Ages
Age Group	Under 8	8 to 12	13 and Over
Proposed Annual Benefit Maximum <sup>a</sup>	\$50,000	\$20,000	\$20,000
Patient Out-of-Pocket Costs <sup>b</sup>	\$ 2,500	\$ 2,500	\$ 2,500
Total Annual Cost	\$52,500	\$22,500	\$22,500
Average ABA Program Hours <sup>c</sup>	1,509	781	401
Hourly Rate Necessary to Consume Annual Benefit Maximum	\$34.79	\$28.80	\$56.11

- a) Current SB234 proposal (SB0234.02)
- b) State of Montana Health Plan average out-of-pocket maximum excluding deductibles and copays
- c) Fiscal Note (these values are higher than the OWAC report; therefore result in a more conservative hourly rate estimate)

The calculated cost per hour for children under age 12 is below the assumed rates used in both reports; therefore, the insurance plan cost is capped at the annual benefit maximum and would not be affected by the hourly rate. For children ages 13 and over, it is estimated that only 3.3%

of those diagnosed will receive ABA services; therefore, the effect on total cost would be negligible.

It is our opinion that the difference in the ABA service hourly rate is not material to the overall cost estimates.

Other (than ABA) Medical Costs

There are significant differences in assumptions and calculation methodology regarding the estimated additional insured medical costs. Our concerns with the OWAC Report estimates mirror those outlined in item 22 of the Fiscal Note; specifically that their assumptions were not validated by the actual claims experience of State health plan members.

In our opinion, the assumptions, methodology and estimated costs for other medical costs in the Fiscal Note are reasonable. We are unable to provide a detailed comparison of costs with the data provided in the OWAC report.

#### Conclusion

In our opinion, the figures represented in the Fiscal Note provide a reasonable estimate of the insurance cost of Senate Bill 234. The estimates contained in the OWAC report understate the anticipated prevalence rate and do not fully account for additional insured medical costs.

#### Other Considerations

There are some other items to consider with respect to the long-term cost implications of Senate Bill 234.

First, the proposed bill does not contain a lifetime maximum benefit provision. Incorporating this provision will reduce the long term cost of the bill, promote judicious use of benefit dollars by families, and limit the risk of provider abuse. Other states adopting similar legislation have imposed lifetime maximums, most notably Florida (\$200,000) and Louisiana (\$144,000).

Next, the cost estimates in the OWAC Report and Fiscal Note both incorporate numerous ABA utilization assumptions based on the likely behavior of consumers, providers and insurers. As noted in the OWAC Report, very little data exists that can directly estimate the costs of ABA benefits. Therefore, it may be helpful to understand the anticipated cost under a "worst-case" scenario where all children eligible for ABA services consume the full annual benefit.

Using autistic patient counts from the Fiscal Note (16 children under age 8, and 43 children aged 9 to 18) and the proposed annual benefit maximum (\$50,000 for children under age 8, and \$20,000 for children aged 9 to 18) results in a maximum insurance cost of \$1,660,000 for ABA services in fiscal year 2010. This is approximately \$935,000 more than the \$724,676 listed in

item 22 of the Fiscal Note, and increases the fiscal year 2010 cost of the bill from \$1,375,466 to \$2,310,790.

A final consideration concerns the potential future expansion of this bill to cover other similar illnesses, since ABA services are used to treat other illnesses. One example of a similar illness is Attention Deficit Disorder (ADD). This illness could require similar behavioral modification, and has a reported prevalence rate five times higher than autism<sup>2</sup>. It may be worthwhile to discuss the risk of potential future expansion with clinical experts and attorneys.

Please call me with any questions of if you would like to discuss. I can be reached at (425) 643-8050, or by e-mail at kelly@actuariesnw.com.

Sincerely,

Kelly Grebinsky FSA, MAAA, FCA

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## References:

1. http://www.autism-society.org/site/PageServer?pagename=about\_whatis\_factsstats; accessed March 2009

2. http://add.about.com/od/adhdthebasics/a/prevalenceADHD.htm; accessed March 2009